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TOWNSEND and TOWNSEND and CREW LLP

By: 

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

JOHN MILLER *et al.*

Application No.: 10/692,424

Filed: October 22, 2003

For: BALLOON CATHETER

Confirmation No. 8368

Examiner: HOOK, JAMES F

Technology Center/Art Unit: 3754

REPLY BRIEF

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellant offers this Reply Brief in furtherance of the Examiner's Answer mailed
December 4, 2006.

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1. STATUS OF CLAIMS

Claims 1-9 are currently pending and are the subject of this appeal. No other claims are pending.

Claims 1-8 were originally presented in the application. Claims 1-8 were amended by preliminary amendment mailed January 8, 2004. Claims 1-8 were amended and claim 9 was added in Appellant's response mailed March 15, 2005. A Final Office Action was mailed on June 15, 2005. Appellant submitted a response to the Final Office Action, Appellants response to the Final Office Action was mailed on July 19, 2005. An Advisory Action was mailed on August 8, 2005. Appellant filed a Pre-Appeal Brief Request for Review on December 12, 2005. Pursuant to the Notice of Panel Decision from Pre-Appeal Brief Review mailed March 2, 2006, claims 1-9 remain rejected and the application remains under appeal because there is at least one actual issue for appeal. Appellants submitted an Appeal Brief that was filed with the Office on September 5, 2006. The Examiner's Answer was mailed on December 4, 2006 maintaining the previously pending rejections of the claims.

As such, the status of the claims is as follows:

Claims 1, 2, 6, and 7 stand rejected under 35 U.S.C. § 103(a) as being obvious over Steen (U.S. Patent No. 6,213,995) in view of Mische (U.S. Patent No. 5,052,105).

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being obvious over Samson (U.S. Patent No. 6,186,978) in view of Mische (U.S. Patent No. 5,052,105).

2. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1, 2, 6, and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Steen (U.S. Patent No. 6,213,995) in view of Mische (U.S. Patent No. 5,052,105).

Whether claims 1-9 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Samson (U.S. Patent No. 6,186,978) in view of Mische (U.S. Patent No. 5,052,105).

3. ARGUMENT

A. Whether claims 1, 2, 6, and 7 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Steen (U.S. Patent No. 6,213,995) in view of Mische (U.S. Patent No. 5,052,105).

In the Final Office Action mailed June 15, 2005, claims 1, 2, 6, and 7 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Steen (U.S. Patent No. 6,213,995) in view of Mische (U.S. Patent No. 5,052,105).

Appellants respectfully traverses this rejection for at least the reasons previously made of record and additionally submit the following remarks in reply to additional comments made in the Examiner's Answer, mailed December 4, 2006 (hereafter "Examiner's Answer"), including the newly added basis of the rejection under MPEP § 2144.06. In particular, Appellants maintain that *prima facie* obviousness has not been established in the present case because the Examiner has, at best, only generally identified certain claim elements as being separately taught in the prior art references, but without the benefit of hindsight there would be no motivation to combine Steen and Mische to achieve the claimed invention. Furthermore, the Examiner has not established that the separate embodiments of hollow micro-tubes and electrical transmission wires as taught in Mische would be recognized in the art as functional equivalents under MPEP § 2144.06.

A *prima facie* case under 35 U.S.C. § 103 requires a clear and particular showing of some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine reference teachings so as to achieve the specific combination as claimed by the applicant. See MPEP §§ 2142, 2143.01; *In re Fine*, 5 USPQ2d at 1598, 1599 (Fed. Cir. 1988); *In re Dance*, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998). The proposed motivation must have sufficient "force" to "impel persons skilled in the art to do what applicant has done." *Ex parte Levengood*, 28 USPQ2d 1300, 1302 (Bd. Pat. App. Inter. 1993); See also, *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The case law of the Federal Circuit "makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the

requirement for showing of the teaching or motivation to combine prior art references." *Id.* at 1616, 1617. The requisite suggestion or motivation is missing in the present instance.

The invention claimed is a catheter comprising a catheter body comprising at least one polymeric tubular member; and a braided tubular structure comprising a plurality of component tubular members each having longitudinal lumens, woven radially in and out to form the braided tubular structure, wherein the braided tubular structure is embedded in a wall of the polymeric tubular member (see, e.g., claim 1). The claimed device provides numerous advantages, including, for example, the capability of fluidly connecting the component tubular members to a plenum, e.g., at a distal and/or proximal end, or coupling a balloon or inflatable member on the catheter body connected to exchange inflation media through the lumens of the braided tubular structure. (see, e.g., Application page 4, lines 8-11; page 4, line 27 to page 5, line 4; claims 8, 9)

The cited reference of Steen teaches an electrode catheter with a central lumen and a braid reinforcement structure within the catheter wall. In addition to structural elements to provide stiffness and rigidity, the braid of Steen also includes solid "signal transmitting elements" or conductive wires. The objective of Steen is to provide an electrode catheter with both signal transmission elements (i.e., electrical or optical) and improved structural support (i.e., braid reinforcement structure). The only signal transmitting elements taught by Steen as suitable for use in the Steen electrode catheter include solid electrically conductive wires and optical fibers.

Mische is directed to a micro-cable interconnect designed for insertion in a catheter lumen. The micro-cable interconnect 10 includes a single exterior insulative flexible coating 12 containing a bundle of terminally prepared, precisely spaced conductor wires 14. The conductor wires 14 are arranged within the flexible coating 12 or resin with a spacing and pitch to identically match the spacing and pitch of interconnect zones 16 which are operatively connected to an integrated circuit or connector of a sensor 18. (col. 2, lines 36-47; Figs. 1, 3, 4, 10-12) The micro-cable interconnect of Mische is specifically designed to match precisely spaced conductors with identical pitch as the sensor's receiving elements or pads, facilitating automatic attachment with the sensor. (col. 1, lines 16-19). Mische additionally teaches that

"[t]he interconnect's flexible one piece micro-construction allows it to be inserted into the catheter lumen with greater ease and less damage than individual wires." In addition to solid metal or glass conductor wires 14 for electrical or optical signal transduction, Mische teaches that micro-tubes can be arranged in the micro-cable interconnect configuration.

The Examiner has alleged that the cited references would have rendered the claimed invention obvious stating, *inter alia*, the following reasons:

"[i]t would have been obvious to one skilled in the art to modify the braided tubular structure of Steen by substituting hollow tubular members for the conductive wires as suggested by Mische where conductive tubing is interchangeable with conductive wires in catheter uses, where such provides another means to transmit something from one end of the catheter to the other which would expand the usefulness of the product and thereby make it more valuable to the user thereby saving money by providing a more versatile catheter."

(Examiner's Answer, page 3-4)

However, the Examiner has not factually established a motivation or suggestion (other than Appellant's own disclosure) to modify Steen to achieve the catheter as recited in independent claim 1. Instead, the Examiner merely identifies alleged claim elements in separate references and then concludes, with no real objective support, that it would have been "old and well known" to selectively replace elements of Steen to achieve the claimed structure.

As previously pointed out, a lack of suggestion or motivation to make the proposed combination of references is at least partially evidenced by the fact that Steen is limited to solid electrical wires or optical fibers and contains no provision for any other means of signal transduction or any type of additional lumen. The Examiner discounts this fact and concludes that "[i]t is immaterial as to whether Steen teaches the need for additional lumens, Mische is teaching that tubes can be used as a substitute to wires to transmit signals in different manners including by pressure of fluids." (Examiner's Answer, page 6). Appellants disagree, this fact is completely relevant to the obviousness analysis, since it is the Examiner that had initially raised, with no support on the record (other than Appellants' own disclosure), the alleged hypothetical advantages of modifying Steen to include additional lumens for "another means" of signal

transduction as a specifically stated rationale for modifying the catheter of Steen (e.g., Final Office Action mailed 6/15/2005, page 3; Examiner's Answer, pages 3-4). However, Steen's silence on this issue supports Appellants contention there simply are no teachings in the Steen to support such a modification and that the rejection is being improperly driven by hindsight analysis.

Moreover, as is discussed in more detail below, the Examiner additionally focuses specifically on Mische predating Steen by "some 10 years" in order to support the assertion that interchanging micro-tubes for solid conductive wires is "old and well known in the art" (Examiner's Answer, page 5). However, Steen's specific disregard of what the Examiner repeatedly alleges was "old and well known" at the time of Steen would appear to weigh against the Examiner's case of *prima facie* obviousness and indicate a lack of motivation or suggestion in the art to make the proposed combination.

With regard to Mische, Appellants have disputed the Examiner's characterization of Mische as allegedly teaching that it is "old and well known" to selectively replace conductive wires with hollow micro-tubes in any context, which has been a primary rationale for the Examiner's proposed combination and rejection (see, e.g., Appellants' Appeal Brief, pages 11-15). In response to Appellant's remarks pointing out that Mische's mere teaching of different embodiments does not indicate a broad and general interchangeability of those embodiments in an unlimited variety of medical catheters, the Examiner states the following:

"the [Mische] reference itself dates back to October 1991 which is some 10 years prior to the patent to Steen which it is used to modify, thereby teaching that at least 10 years prior to Steen it was known in the art to provide solid wires for transmission of signals or hollow tube elements in catheters, therefore such teachings are of what is old and well known in the art at the time Steen was issued, and that it was emerging technology in 1991, in diagnostic catheters to utilize wires to transmit signals from end to end in a catheter"
(Examiner's Answer, page 5)

Appellants respectfully submit, however, that these arguments do not appear to address, let alone rebut, Appellants' previous remarks regarding lack of suggestion/motivation

for the proposed combination. For sake of clarification, Appellants are not disputing the *per se* existence in the art of solid electrically conductive wires or pressure sensing micro-tubes, or even that those elements may have been used in some catheter based systems. Appellants are disputing, however, the existence of any objective indica in the prior art (separate from Appellants' own application) that would teach, suggest, or motivate one of ordinary skill in the art to selectively replace the electrically conductive solid wires in Steen with hollow micro-tubes, as has been suggested by the Examiner. In particular, Appellants disagree that Mische's mere teaching of different embodiments, without more, would provide the requisite motivation. Simply citing the age or filing date of a Mische, as noted above, does not cure the deficiencies of the reference's teachings.

Not only is the Examiner's characterization of Mische overly generalized and inaccurate, but there is also no teaching in Mische, which focuses on a precisely spaced interconnect cable designed for positioning in a lumen, that would teach or suggest embedding in a wall of a polymeric tubular member, a braided tubular structure having a plurality of component tubular members, as currently claimed. The objective of Mische is to provide a cable designed for insertion in a catheter lumen and to precisely match the receiving portion of an integrated circuit or sensor connector. In keeping with this objective, Mische teaches a cable with precisely arranged and terminally prepared conductor wires 14, which specifically match a sensor or circuit receiving portion, and which are bundled together in a flexible one piece coating 12 or construction designed for insertion into a catheter lumen. The fact that solid electrical cables as well as pressure sensing microtubes may be acceptable for use in the cable of Mische, would not have suggested acceptability for use in selectively replacing or interchanging those elements in any catheter. Mische certainly provides no suggestion to deconstruct/disassemble the precisely arranged bundle of conductors 14 of Mische's interconnect cable as alleged, and selectively replace solid conductive wires with hollow micro-tubes in Steen's catheter system.

Thus, while certain claim elements may separately be located throughout various prior art references, there is no teaching or suggestion in the cited art to combine the cited references to achieve the claimed invention. "Mere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole." *In re Kahn*,

441 F.3d 977, 986, 78 USPQ2d 1329 (Fed.Cir. 2006). The Office must additionally establish that "one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious." *Id.* "Combining prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight." *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); *Ecolochem, Inc. v. Southern California Edison Company*, 227 F.3d 1361, 1371-1372, 56 USPQ2d 1065 (Fed.Cir. 2000).

In response to Appellants' comments regarding lack of motivation to make the proposed combination of references and use of impermissible hindsight reconstruction, the Examiner states that "it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning." (Examiner's Answer, page 7) The Examiner further argues, *inter alia*, the following:

"The examiner is not using Mische to teach substituting the entire bundle structure but utilizing the teachings of Mische that set forth that microtubes are equivalent signal transmission elements used in catheter applications, where Steen provides all other structure, and the substitution of one equivalent element for another under the teachings to do so is obvious to one skilled in the art."
(Examiner's Answer, page 7; emphasis added)

However, this is the essence of hindsight analysis and further illustrates improper use the Appellants' disclosure as a blueprint, while "cherry-picking" among isolated teachings of Steen and Mische, and failing to consider the cited references in their entirety. It is well settled that the Office "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *Ecolochem, Inc. v. Southern California Edison Company*, 227 F.3d 1361, 1371 (Fed.Cir. 2000).

Mische actually teaches away from the proposed modification and combination with Steen. Mische does not teach separating the conductors of the Mische interconnect bundle, as suggested by the Examiner, but teaches just the opposite. Mische focuses on a precisely arranged bundle of conductors for placement in a catheter lumen, with no teaching or suggestion to deconstruct the precise arrangement or position conductors elsewhere in a catheter. In fact,

such a modification, as is being proposed by the Examiner, would go against the objective of the Mische invention, which is a precisely arranged interconnect cable for a catheter lumen. Moreover, as noted above, while Steen teaches electrical cables, there are no teachings in Steen that would lead to selectively replacing the disclosed electrical cable elements. As such, one of ordinary skill, properly viewing the cited references as a whole, would not have found the requisite teaching or "force" to "impel persons skilled in the art to do what applicant has done", as required to establish *prima facie* obviousness, but would actually be led away from the claimed invention.

Appellants point out that were the "proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed combination." *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed.Cir. 1984); MPEP §2143.01(V). Instead, in the present case, the artisan viewing the cited references would actually be led away from the claimed invention.

The Examiner additionally cites for the first time §2144.06 of the MPEP, alleging that hollow micro-tubes of Mische and the solid electrical transmission wires of Steen constitute art recognized equivalents known for the same purpose. In particular, the Examiner provides the following arguments:

"As per MPEP 2144.06 a *prima facie* case can be supported by combining equivalents known for the same purpose where Mische acknowledges that microtubes can be used for the same type of signal transmission elements as taught in Steen, and that there are advantages to using microtubes for its ability to transmit signals via pressurized fluids for use with specific types of body sensors, thereby providing the motivation to combine the references, where Steen teaches embedding the braided structure in a resin by stating 'provided within the wall of the tubing' in column 3, line 19, where the wall is later defined in lines 42-56 to be formed of resins"

(Examiner's Answer, pages 6-7; emphasis added)

Appellants respectfully disagree. Under MPEP § 2144.06, "[i]n order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be

recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents." citing *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958). In the present case, the Examiner has not offered any evidence or established that the elements are, or would have been recognized in the art as, functional equivalents.

Contrary to the Examiner's statement, nowhere does Mische actually acknowledge that microtubes can be used "for the same type of signal transmission" as the elements taught by Steen. In fact, the micro-tubes of Mische and the electrical transmission wires of Steen are actually used for a very different type of signal transmission - i.e., pressure sensing (micro-tubes) compared to transmission of an electrical signal (electrical transmission wires). Characterizing elements as equivalents merely for the vaguely defined function of transmitting a signal from one end of a catheter to the other is too overly broad and generalized for proper analysis under MPEP § 2144.06.

In fact, the Examiner's argument that these elements are functional equivalents directly contradicts the Examiner's other rationale for making the proposed combination, where it is alleged that replacing electrical transmission wires with hollow micro-tubes would actually "expand the usefulness of Steen" and make the Steen system a "more versatile catheter." (Final Office Action mailed 6/15/2005, page 3; Examiner's Answer, paragraph bridging pages 4-5). If the cited elements were indeed mere equivalents as is now alleged, then it would stand to reason that the usefulness and versatility of the modified catheter would remain constant, rather than expand.

Even if Mische were to teach interchangeability of micro-tubes and electrically conductive wires in the interconnect cable, Mische does not teach or suggest that those elements are broadly interchangeable in any other system. It is well established law that merely listing several elements as "interchangeable for one purpose will not establish their equivalence for all purposes." *Ex Parte Uwe Neumann*, 2001 WL 1176466, citing *In re Jezl*, 396 F.2d 1009, 1012, 158 USPQ 98, 100 (CCPA 1968). Furthermore, Appellants point out that nowhere does Mische actually teach any "advantages to using microtubes for its ability to transmit signals" as alleged by the Examiner. (Examiner's Answer, page 6-7)

Furthermore, even if functional equivalence were established (which has not been done in this case), it would not be dispositive of *prima facie* obviousness in the present case. It is well established that "expedients which are functionally equivalent to each other are not necessarily obvious in view of one another. *In re Scott*, 323 F.2d 1016, 1019, 139 USPQ 297, 299 (CCPA 1963); MPEP § 2144.06. Thus, even if the cited elements of Steen and Mische were considered functional equivalents, a *prima facie* case of obviousness would still require some teaching, suggestion or incentive supporting the proposed substitution. *Ex Parte Uwe Neumann*, at 4. Appellants respectfully submit that the requisite suggestion or motivation has not been established for at least the reasons set forth above.

In sum, Appellants submit that *prima facie* obviousness has not been established for at least the above cited reasons. Appellants also reiterate that the Office bears the initial burden of factually establishing and supporting a *prima facie* case of obviousness. *See, e.g., In re Fine*, 5 USPQ2d at 1598; MPEP § 2142. If the Office does not establish a *prima facie* case, then Appellants are under no obligation to submit evidence of nonobviousness. MPEP § 2142; *In re Piasecki*, 223 USPQ at 787, 788.

Accordingly, for at least the reasons above, the final rejection of claims 1, 2, 6, and 7 under 35 U.S.C. §103(a) be reversed and the claims allowed.

B. Whether claims 1-9 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Samson (U.S. Patent No. 6,186,978) in view of Mische (U.S. Patent No. 5,052,105).

In the Final Office Action mailed June 15, 2005, claims 1-9 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Samson (U.S. Patent No. 6,186,978) in view of Mische (U.S. Patent No. 5,052,105). Appellants respectfully traverse this rejection for at least the reasons previously made of record and submit the following remarks in further reply to additional comments made in the "Examiner's Answer."

It is stated in the Examiner's Answer that the teachings of Mische are applied here in the same manner as applied in the above discussed rejection, and that only the base reference of Samson is changed in the present rejection. (Examiner's Answer, page 8). Appellants disagree. The combination of Mische and Samson in the current rejection is even more tenuous than the above rejection because the Examiner is baldly interpreting the hollow micro-tubes of Mische as being broadly interchangeable with any metal capable of conducting electricity (regardless of how the metal is actually being used in the cited reference), in any catheter, in any context; and further concludes (without support in the prior art) that one of ordinary skill would somehow be motivated make such a modification in this case.

In particular, the Examiner continues to propose modifying the braid reinforcement Samson to include hollow micro-tube signal conductor elements of Mische as "alternate signal transmission means" (even though Samson does not teach signal transmission using the braid). To this end, the Examiner provides, *inter alia*, the following argument in support of the modification:

"The braid [of Samson] can be made from a variety of structures including plastics and stainless steel wires or metal ribbons, including malleable metals and alloys (co. 9, lines 32-39 and col. 10, lines 8-25). Mische clearly sets forth in column 3, lines 10-14 that the conductors 14 can be formed of metal wire such as 'copper, gold or silver plated copper, or aluminum' which are also known malleable metals. Therefore, as set forth above Mische discloses it is obvious to substitute for a solid metal wire of a malleable metal and to utilize a microtube for this substitution, thereby teaching the

motivation to combine the teachings of the references, where both Mische and Samson are dealing with catheter structures."

(Examiner's Answer, page 9)

However, Appellants respectfully submit that the Examiner again is merely identifying alleged claim elements in the separate references of Samson and Mische, and concluding, with no supporting evidence or logic, that it would have been obvious to combine the references to achieve the claimed invention.

Nothing is Samson supports the modification proposed by the Examiner. As previously noted in the record, Samson teaches a tubular catheter with a conventional solid braid reinforcement. The body of the Samson catheter includes an assembly of an inner tubing and an outer tubing separated by an annular space, with the conventional solid braid reinforcement integrated between the inner and outer tubings. In operation, fluid can be passed through the annular space and into the balloon. (see, e.g., Samson, col. 4, lines 46-49, 55-64).

The alleged reasoning provided by the Examiner for replacing the solid reinforcement of Samson, which is founded on interchanging "conductive elements", is wholly without support, since Samson does not contemplate using the reinforcement structure for any signal transduction in the first place. The solid braid reinforcement of Samson is specifically designed and used solely for structural support, and contains no signal transmission elements nor any design for conducting electricity or any signal of any kind. In fact, signal transmission with the braid reinforcement of Samson would not even be plausible in the Samson catheter due to the catheter design and construction. For example, electrical transmission with the braid reinforcement would not be possible since passing of fluid through the annular space to fill the balloon would contact the interstices of the solid braid structure (per the design of Samson) and short-circuit any hypothetical electrical current (Samson, col. 5, lines 1-3). Thus, not only is Samson completely devoid of any reason or suggestion to make the modification being proposed by the Examiner, but Samson actually teaches against the modification.

With regard to Mische, the only apparent connection between Mische and Samson is that each reference contains an element that can be made of a malleable metal. This tenuous

connection simply would not be sufficient to lead one of ordinary skill 1) from the solid reinforcement structure of Samson; 2) then to an electrical transmission wire; 3) then to the interconnect cable of Mische (e.g., including a solid metal wire); 4) then to a hollow micro-tube for pressure sensing, as taught by Mische, and 5) then back to the device of Samson where pressure sensing micro-tubes of Mische would then converted to a structural reinforcement braid, as has been suggested by the Examiner. Such argument simply does not constitute the clear and particular motivation or "force" to "impel persons skilled in the art to do what applicant has done." Thus, the combination argued by the Examiner again appears to result from impermissible hindsight reconstruction based on the Appellants' own application, and wholly lacks support in the sighted references. *Ex parte Levengood*, 28 USPQ2d 1300, 1302 (Bd. Pat. App. Inter. 1993); *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

With regard to claims 8 and 9, Appellants maintain that these claims are allowable at least for depending from allowable independent claim 1 (see above). In addition, however, these claims are additionally allowable for reciting specific elements of the invention that are not taught in the prior art.

In particular, even if one of ordinary skill in the art were to combine the teachings of Samson and Mische (although there would be no logical reason or motivation to do so, as discussed above), the combination of references would still fail to teach each and every element of the claimed invention, as recited in claims 8 and 9, thereby precluding *prima facie* obviousness. As is well known by the Examiner, *prima facie* obviousness requires that each and every element be taught in the prior art. MPEP §2143.03.

As noted above, Samson teaches an annular space between two tubings, where the annular space can transmit a fluid, for example, for inflation of a balloon connected to the catheter. While Samson teaches a solid braid reinforcement structure, the reinforcement structure is not configured for any transmission of fluid or any signal of any kind through the catheter. Thus, even if one were to replace the solid reinforcement of Samson with hollow micro-tubes as has been suggested, the micro-tubes would, like the solid reinforcement being replaced, be configured to provide structural support only, but would not be configured for fluid

transmission (or transmission of anything), and certainly would not be fluidically connected to a plenum or balloon.

As such, even if the references were combined, the resulting combination would still fail to teach a plurality of component tubular members where the longitudinal lumens are fluidly connected to a plenum at least one of the distal and proximal ends, as recited in claim 8. Nor would the hypothetical combination of references, even if combined, teach a balloon on the catheter body connected to exchange inflation media through the lumens of the braided tubular structure, as recited in claim 9.

Accordingly, for the reasons set forth above, prima facie obviousness has not been established and withdrawal of the rejections of claims 1-9 under 35 U.S.C. § 103(a) is respectfully requested.

4. CONCLUSION

Appellant believes that the above discussion is fully responsive to all grounds of rejection set forth in the Final Office Action dated June 15, 2005, as well as remarks presented in the Examiner's Answer, mailed December 4, 2006. For the reasons set forth above, it is respectfully submitted that the rejection should be reversed.

If for any reasons the Examiner believes a telephone conference would in any way expedite resolution of the issues raised in this appeal, the Examiner is invited to telephone the undersigned at 206-467-9600.

Date: _____

2/2/2007

Respectfully submitted,



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